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ABSTRACT

The authors review technological advances in medicine, such as gene manipulation, amniocentesis, ultra sound, organ transplants, and cloning, and point out ethical and moral dilemmas resulting from such capabilities. Implications of overpopulation are briefly considered. The authors contend that the decision "to play God" has already been made, and that the challenge now is to increase understanding of the implications and accept responsibility for developing an ethical framework for decision making. (CI)

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What If I Don't Want To Play God?

As science and technology continue to advance, we humans are increasingly gaining power to sustain, manipulate and even change life. This power, especially in the area of medicine, has important implications. We have put ourselves in the position where we are making decisions which were formerly left to God. Leroy Augenstein sees us in a moral dilemma. In his book, Come, Let Us Play God, he states: "We have 10 to 25 years to set up new decision-making apparatus and answer some profound questions which previously we have left to God" (Augenstein, 1969, p. ix). With Augenstein, we believe that it is inevitable that we must reevaluate our moral and ethical standings.

Gene Manipulation

In 1953 James Dewey Watson and Francis Crick discovered what they called "the secret of life" (Howard & Rifkin, 1977, p. 16). Through their research and experimentation these scientists discovered the physical make-up of deoxyribonucleic acid, or what is more commonly known as DNA. Since this discovery, science has increasingly moved forward. Today we not only know the physical make-up of DNA, but have knowledge about how it reproduces itself, how it sends instructions to the cell, and how to analyze chromosomes to determine genetic function (Howard & Rifkin, 1977, p. 24).

Science marched on. In 1973, doctors Stanley Cohen and Herbert Boyer discovered a novel life form (Howard & Rifkin, 1977, p. 29). This was accomplished by combining two unrelated organisms to form a new one. The technique is referred to as recombinant DNA.

The discovery of recombinant DNA has opened many doors in the areas of biology and medicine. Although some of the research information is announced in the news media, many people are unaware of either the full scope of the discoveries in this area or the capabilities which this new information provides us or, most importantly, the ethical implications (Augenstein, 1969, p. 18).

One of our new capabilities is detection of defective genes. We now know of at least 500 different recessive elements we consider defective (Augenstein, 1969, p. 1969, p. 18). Some of the more common produce muscular dystrophy, cystic fibrosis and phenylketuria (PKU).

It has also been estimated that each one of us has between 5 to 10 defective genes, which if matched up, would produce a child with some type of genetic defect (Augenstein, 1969, p. 30). As a result of this match-up, 1% of our live births are so defective that they will never know they are a human being (Augenstein, 1969, p. 31).

Knowledge about defective genes compels us to move on. Tests have been deveioped to determine if an individual is a carrier of one of the defects known to exist; tests are currently available for tracing 19 different recessive genes in parents (Augenstein, 1969, p. 20). One such test is used to determine the presence of the recessive gene for muscular dystrophy. It is necessary to take a

biopsy, usually from the large leg muscle, and grow it until a substantial number of cells are obtained. These cells are then tested for the biochemical abnormality that causes muscle cells to turn into fatty tissue (Augenstein, 1969, p. 20). This test, as well as the others, involve many hours of clinic and lab work and are still not 100% accurate.

A problem arises when potential parents are told that they carry a defective recessive gene. If they decide to procreate a child, their chances may be one in four (depending on the specific recessive trait) that the child will be born in some way defective. What would you do? You could decide not to have any children and not risk the chance of bringing a child with a serious defect into this world. Or, you could take the risk of having a child and wonder if it would be healthy or severely deformed. If you have a difficult time arriving at an answer to this dilemma, science has some more information now to help you along.

We now have several tests which are performed on the fetus during early pregnancy. One form of testing is amniocentisis. The process itself is relatively painless and is usually performed on a woman in her sixteenth or seventeenth week of pregnancy (Howard & Rifkin, 1977, p. 136). A doctor inserts a long needle into the amniotic cavity of the womb and removes a small sample of the amniotic fluid. (Amniotic fluid contains small numbers of living body cells that are thought to be sloughed off from the fetus.) The cultured fetal cells can be analyzed chromosomally after about two weeks of growth; about four weeks are necessary to determine biochemical abnormalities (Karp, 1976, p. 110).

Another prenatal test is ultrasound. A transmitting crystal directs an intermittent ultrasound wave into the patient, and a receiving crystal detects the alteration in wave characteristics. The sound impulses are converted to light and displayed on an oscilloscope screen (Karp, 1976, p. 118). The pictures of the fetus show the positioning as well as bone formation of the head and trunk. Ultrasound can aid in the diagnoses of spina bifida, microcephaly, and anencephaly, to name just a few.

We now have the methods of obtaining crucial information related to fetal abnormalities. Although science has provided us with this knowledge, the scientists will not tell us what to do. The implications are enormous.

Knowing that each one of us carries between five-to-ten defective genes, suppose a particular couple decides to go through genetic counseling to determine the chances of procreating a child carrying a faulty genetic match-up. Through the counseling it is determined that there is a 50% chance that the faulty genes will match up and produce a severely defective child. Suppose this couple decides to have a child with the intent of using amniocentisis to conclude more accurately which side of the coin landed up. The dilemma increases. Through amniocentisis the fetus is diagnosed as having cystic fibrosis. This child will be unable to digest food properly, his or her ligaments will not form as they should, so that the child will have trouble using arms and legs, and the lungs will fill up with fluid which must be eliminated almost daily with considerable pain to the child (Augenstein, 1969, p. 28). Furthermore, most of these children do not live past their teens.

Once this information is available, some profound questions develop. At this point we must ask ourselves what obligations we have to reduce suffering. The position of ethicists such as Paul Ramsey and Leon Kass is clear: "fetuses are human persons, abortion, therefore, constitutes murder and genetic counseling directed toward this end is indefensible." However, Joseph Fletcher represents an opposing position; he feels that to fail to prevent birth of a deformed child is immoral and irresponsible (Karp, 1976, p. 45).

We seem to be in quite a dilemma here. How much responsibility do we have? When is a fetus a human being? How should we make these ethical decisions? We have no answers at this point. However, this is just the beginning of the profound questions we must face.

Quality of Life: Prolonging Life or Postponing Death

About twenty-five years ago, if one of our vital organs--such as the kidney or heart—became diseased, nothing could be done but to wait for death. Today, however, with the help of science, we are capable of removing the diseased organ and replacing it with a healthier one. Although the transplants have been highly successful, the greatest problem arises from the body's rejection of the new foreign part.

If science and technology continue to advance at the present rate, we will probably have this minor problem of rejection solved within the next 10 to 25 years. Many lives will be prolonged with the aid of this new knowledge and advanced technique.

When new knowledge and techniques are implemented, it is inevitable that new problems will arise. In dealing with organ

transplants, the problem of defining death arises. Because the organ to be transplanted comes from a donor, the question of when a person is legally dead comes into play. Normally in the United States, death is certified by a licensed doctor when there is no brain activity, no heartbeat, and no breathing (Augenstein, 1969, p. 39).

Suppose, however, a young girl who is an appropriate donor is admitted to the emergency room. A respirator is needed to maintain her breathing and heartbeat. In another part of the hospital, a patient is waiting for an appropriate donor so that a desperately needed transplant can be performed. This patient is a well-known surgeon capable of performing an extremely rare and life saving procedure. To complicate matters, the emergency room patient shows signs of having severe brain damage. In this situation would you consider this person to be legally dead and remove the life-sustaining machines so that death would occur naturally?

Situations like these call attention to the need for specific legal definitions for both death and the conditions under which an organ can be transfered from one person to another.

Another problem arises concerning the definition of death with the use of medicine and life-sustaining machines. The Quinlan case is one illustration of this problem. At the trial, which was held in the Superior Court of New Jersey, the judge states it is the court's power over a person suffering under a disability to protect and aid the best interest. To permit Karen Quinlan to die, therefore, is not protection and is not something in her best interest. In situations

like this should the court, doctors, or parents or legal guardian make the decision? Who should have the responsibility of deciding the quality of that person's life?

The American Euthanasia Association has developed a card for those individuals who wish to avoid such life-sustaining measures. Part of the card states, "I request that I be allowed to die and not be kept alive by artificial or heroic measures . . . I do not fear death as much as I fear the indignity of deterioration, dependence, and hopeless pain" (Behnke & Bok, 1975, p. 155).

If a person has not signed such a card, others are in a dilemma when they must decide what is the most humane thing to do. Is it worth putting a person through added pain to prolong that life a day, possibly a week? Who should be responsible for decisions pertaining to life or death when the person involved is not capable of making that decision? The answers are not easy.

Cloning: An Approaching Reality

If science continues to advance at the rate it is now, we will probably have the ability to produce individuals who are carbon copies of us. This process is referred to as cloning. It is accomplished by removing the nucleus from an egg and replacing it with a cell from either a different part of the organism, or from a totally different organism. Such a process has already been performed successfully on frogs. In 1952, Drs. Robert Briggs and Thomas J. King replaced the nucleus of an already fertilized frog egg with the tissue of another frog. The resulting tadpoles were all duplicates of the tissue-cell

donor (Howard & Rifkin, 1977, p. 121). Although it may seem somewhat bizarre to think that this has implications for the human species, the reality of it all is not far away. Dr. Joshua Ledenberg feels the biggest breakthrough will come any time within the next fifteen years (Howard & Rifkin, 1977, p. 122).

With this cloning technology we would have the power to produce carbon copies of ourselves and then place them into storage. When the time came and a heart or other vital organ went bad, we could just transplant a part from our copy. In this way there would be no problem of rejection since both bodies would be genetically identical.

Our Population Problem

We realize that the topic of population explosion has been widely (if not excessively) presented in many different media. We are not sure, however, that the implications are fully realized. Augenstein has put this problem into a good perspective. He states, "The average increase in the population per year is 2 percent.. . . If we continue to increase at 2 percent per year, the world population will double in a short 35 years . . . If we continue to increase at the same rate for 500 to 600 years, there will be one square yard per person over the whole face of the earth" (Augenstein, 1969, p. 55).

Food shortage and overcrowding are only a few of the consequences of our increase in number. Studies have shown that over one quarter of the world's population is already suffering from malnutrition or starvation (Howard, 1977, p. 160). And the situation is getting worse. In some of our underdeveloped countries, by the time technology

has been employed to produce more food for the existing population, the number of people will have increased and the new amount of food will not be enough.

The different forms of contraceptives now available offer one solution to our problem. Judging from the steady increase in population, however, either these methods are not known widely, not used properly, or not used at all.

Another solution to our population problem would be the implementation of mandatory birth control practices. A birth could be made contingent upon a death (Augenstein, 1969, p. 68). This practice does not seem very feasible, however, since we now have the knowledge to prolong life past the natural time of death.

Finally, mandatory sterilization could also be implemented. Using this method, we would not only be able to decrease our growing numbers, but would also be capable of creating a "superior" race by allowing only individuals with certain qualities to reproduce.

Augenstein feels that some form of rationale control must be implemented. The most important implication here is that we increase our awareness about the problem and approach it responsibly and seriously. As Augenstein states, "The population explosion is our largest and most worrisome and demanding human problem. If we handle it badly, then there is no sense in worrying about the others" (Augenstein, 1969, p. 79).

Conclusion

The issues that have been presented in this paper constitute only a small number of those that will confront us during the next 10 to 25 years.

The most important issue is population. Even back in the 1800s, the problem of overpopulation was recognized by Reverend T. R. Malthus:

> "with regard to the principle of population, it is never the question, whether a country will produce any more, but whether it may be made to produce a sufficience to keep pace with an unchecked increase of people . . . in this country, it is not the question whether by cultivating all our commons, we could raise considerably more, . . . but whether we could raise sufficient for a population of twenty millions in the next twenty-five years, and forty millions in the next fifty years" (Malthus, 1806, p. 298).

This overpopulation problem is still with us today, and is indeed serious. We do not have time to wait to solve this problem. Our generation must face the issue of population and come up with some answers. We cannot procrastinate any longer.

Many of the moral and ethical dilemmas have developed through our advancements in science. It is certain that science will continue to advance. We must, therefore, accept these advancements and move with them morally, ethically, and responsibly.

The issues presented in this paper were discussed in a graduate-level course. Following the discussion, the students filled out a short questionnaire related to their reactions. The results showed that nearly half (47%) did not like the idea of deciding who should live, who should die, and who should play God.

The decision to play God, however, has already been made. From here we must increase our awareness of the implications these decisions have on us, and accept our responsibility in developing a viable ethical framework in which these profound decisions can and will be made.

References

Augenstein, L. Come, let us play God. New York: Harper and Row Publishing, Inc., 1969.

Behnke, J. A. & Bok, S. (Eds.) The dilemmas of euthanasia. New York: Anchor Press/Doubleday, 1975.

Howard, T. & Rifkin, J. Who should play God? New York: Dell Publishing Co., Inc., 1977.

Karp, L. E. Genetic engineering: Threat or promise. Chicago: Nelson-Hall, Inc., 1976.

Malthus, T. R. Principles of population. London: Printed for J. Johnson, 1806.